

ABSTRACT

A low-cost, flexible, high performance system and method comprises a means for interfacing a code division wireless system to a fast packet-switched network for transmission over a core network to a destination terminal user via a destination access node and a destination access radio port. The method is for code division switching at an originating terminal, the originating terminal being located within a microport cell of a terrestrial wireless network at a given instant in time, where said network interfaces with an access radio port, and comprises the steps of spreading a transmission signal by a PN-code assigned to an intended receiving port, inserting an identifier of a few bits for identifying a user, spreading a payload data signal by an orthogonal code, spreading the orthogonal spread payload data signal by the PN-code associating the user with payload data, modulating the PN-code spread transmission signal and the twice-spread payload data signal, and forwarding the modulated PN-code spread transmission signal and the modulated twice-spread payload data signal to an access radio port. The code division switching system at an originating terminal is described, the originating terminal being located within a microport cell of a terrestrial wireless network at a given instant in time, where said network interfaces with an access radio port, comprises a first spreader for spreading a transmission signal by a PN-code assigned to an intended receiving port, a second spreader for spreading a payload data signal by an orthogonal code assigned to a receiving terminal user to which the payload data signal is directed, the payload data signal being further spread by the first spreader, a means for forwarding the PN-code spread transmission signal to an access radio port and a means for forwarding the twice-spread transmission signal to an access radio port.